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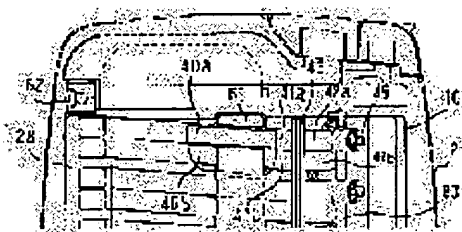
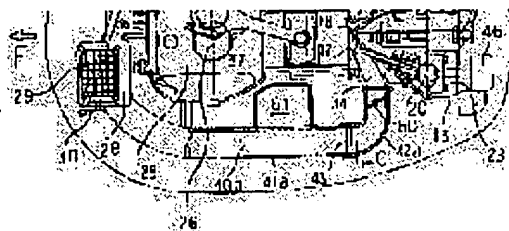
## (54) INTAKE STRUCTURE OF OUTBOARD MOTOR

(57)Abstract:

**PROBLEM TO BE SOLVED:** To satisfy combustion, especially in a low speed area so as to improve output, by communicating a first surge tank having an outside air intake with an intake valve, and communicating a second surge tank with the middle of this intake valve, and also arranging an intake control valve between the second surge tank and the intake valve.

**SOLUTION:** In this outboard motor, a first surge tank 28 is arranged, which is made to serve as the air introducing part of an intake passage 40 to feed air to each air cylinder of an engine 10, an intake opening 29 is opened in the upper end part of the first surge tank 28, and a throttle body is attached on the upper side of the intake opening 29. Two upper and lower intake

passages 40a, 40b are connected to each air cylinder, however, at this time, a second surge tank 61 is communicated with and connected to only the upper side intake passage 40a of each air cylinder. Also, an intake control valve 60 is arranged in the upper side intake passage 40a, and an injector 45 is arranged in the lower side intake passage 40b. Hereby, the intake passages are selectively used according to an engine operating condition, so that the length of the intake passages is lengthened during a low speed period so as to improve a low speed torque, and shortened during a high speed period so as to improve a high speed torque.



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